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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

LY, CHEYNE D

| ART UNIT | PAPER NUMBER |
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1631

DATE MAILED: 09/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 09/737,190 | SHIBUYA, TETSUO | |
| | Examiner | Art Unit | |
| | Cheyne D Ly | 1631 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 3-11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 2 and 12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-12 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

1. Applicants' arguments filed June 14, 2004 have been fully considered but they are not deemed to be persuasive. Rejections and/or objections not reiterated from previous office actions are hereby withdrawn. The following rejections and/or objections are either reiterated or newly applied. They constitute the complete set presently being applied to the instant application.

CLAIM REJECTIONS - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 2 and 12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

4. The instant rejection is necessitated by Applicant's amendment.

RESPONSE TO ARGUMENTS

5. Applicant's amendment does not help Applicant overcome the vague and indefinite issue of claims 2 and 12 as discussed below.

6. Specific to claims 2 and 12, line 1, the preamble recites a method for analyzing the data structure of a target array while the body of the claim recites steps for changing a variable that is included in a target array. Claims 2 and 12 are vague and indefinite because it is unclear whether the target array, which is embodied in this method claim, is a mathematical array having a plurality of elements, or the representation of the elements generated an array apparatus. Clarification of the metes and bounds is required.

CLAIM REJECTIONS - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 2 and 12 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Kadashevich et al. (US005369577A).

9. This prior art rejection is directed to an array apparatus comprising data elements as discussed in the above 35 USC §112, Second Paragraph, rejection.

10. This rejection is maintained with respect to claims 2 and 12, as recited in the previous Office Action, mailed March 10, 2004.

11. The instant rejection is necessitated by Applicant's amendment.

RESPONSE TO ARGUMENT

12. Applicant argues that Kadashevich et al. discloses "that 'a collection of words is searched based upon an input word'...and not an array consists of a plurality of different elements, as claimed in the present application." Applicant's argument has been fully considered and found to be unpersuasive. Kadashevich et al. discloses a collection of words is searched based upon an input word (column 1, lines 54-56) wherein a word is made up of a string of different characters (array of a plurality of different elements). Therefore, the disclosure of "input word" and "set of words" by Kadashevich et al. represents arrays of a plurality of different characters (elements) as required by the claimed invention.

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13. Applicant argues that Kadashevich et al. does not disclose the limitations of a target array, a first generated array, and second generated array wherein the first and second array has elements that correspond to the target element. Applicant's argument has been considered and found to be unpersuasive. Kadashevich et al. discloses a method for using an apparatus for searching a collection of words based upon an input word (target array). The apparatus generates a first set of words containing members that are lexically related (correspond) to the input word (target array). The first set of words include members containing inflectional suffices, #ful (first array having has elements that relate (correspond) to the target element), #ish (second array having has elements that relate (correspond) to the target element),...and #y (column 1, line 54, to column 2, line 12).

14. Applicant argues that Kadashevich et al. does not disclose the limitation of traversing said target array and replacing as directed to "location" and "predetermined direction." Applicant's argument has been considered and found to be unpersuasive. Kadashevich et al. the analyzer traverses the lexicon tree (predetermined direction), checking all possible interpretations of each character in the input string. If the end of the input string is reached (location) at the same point that the end of a stem or suffix is reached, then the input word has been successfully parsed (column 23, line 53 to column 24, line 4; and column 25, Traversing the Lexicon §).

REJECTION RE-ITERATED.

15. Kadashevich et al. discloses a method of making and using a morphological (structure) analyzer of a first and second set of words (array of different elements) (column 2, lines 12 to

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column 3, line 21). The text is organized within an array (column 8, lines 19-31), as in instant claim 2, steps (a) and (b).

16. The analyzer parses the text and traverses said text to identify matching letters (complement) for each character in the input word (first array) against a sequence (second array). The analyzer traverses the lexicon tree (predetermined direction), checking all possible interpretations of each character in the input string. If the end of the input string is reached (location) at the same point that the end of a stem or suffix is reached, then the input word has been successfully parsed (column 23, line 53 to column 24, line 4; and column 25, Traversing the Lexicon §), as in instant claim 2, steps (a) and (b), (i).

17. In the event of words that are not valid, the words must be replaced by either the contents of <BAS> fields or by a word formed by combining the abstract stem with a root suffix, as in instant claim 2, steps (a) and (b), (ii).

18. The performance of the traversing the lexicon step is a recursive function (repeat) (column 25, lines 35-49), as in instant claim 2, steps (a) and (b), (iii).

19. The method of Kadashevich et al. comprises steps for analyzing a structure of an array as directed to the current word (first array) and another word (second array) (column 8, lines 27-49), as instant claims 2 and 12, step (c).

20. The analyzer comprises a derivational history including information about any parses that were successfully performed by the recognition engine on the input word. The derivational history contains, for each successful parse of the input word, the part of speech of the input word for that particular parse (prior occurrence) (column 2, lines 20-25), as in instant claim 12, steps a) and b).

CONCLUSION

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

22. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

23. This application contains claims 1 and 3-11 drawn to an invention nonelected without traverse, February 10, 2003. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01

24. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to (571) 272-0547.

25. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance. Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of

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document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

26. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199.

27. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.

28. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward, Ph.D., can be reached on (571) 272-0722.

C. Dune Ly
9/7/04

Ardin H. Marschel 9/12/04
ARDIN H. MARSCHEL
PRIMARY EXAMINER